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ABSTRACT

A statewide goal priority instrument was validated. Public hearings were held, the results summarized by citizens, and an instrument constructed on this summary. The instrument design was that of Stake and Gooler, which suggests important variations in respondent publics, the scales employed, and the specificity of the statements. These variations were confirmed. A diverse group of respondents was interviewed. The validity of the instrument was deemed to be high except that it did not detect an underlying dissatisfaction. Technical and substantive results of the field test are discussed. Caution is suggested in gathering data from the general public. (Author)

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VALIDATING A GOAL-PRIORITY INSTRUMENT

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Summary of Study

Organizations typically become impermeable to new or critical information, especially at the top management level. This problem may be attacked by systematically collecting and analyzing the opinions of client publics about organizational goals, programs, and image. This study developed and field tested such a procedure.

The content of the procedure was drawn from Action Goals for the Seventies: An Agenda for Illinois Education, a summary of the outcomes of the OSPI public hearings. The measurement techniques were drawn from CIRCE's latest research on goal priorities. This research suggests that various publics' responses to goal statements depend on the specificity of the goals and the type of scales used. These assumptions were verified when the instrument was field tested on a group of forty citizens of diverse backgrounds in a medium-sized Illinois city.

The field test showed that mastering basic skills and providing equal educational opportunity were the most important goals for the total group. Providing opportunities for training in the world of work and for expressing creativity were least important. On the other hand, respondents thought most of the available money should be spent on mastering basic skills, providing equal educational opportunity and on providing opportunities for training in the world of work while not much money should be spent on anything else.

Within the response totals lie interesting differences among the three groups analyzed--students, school personnel, and citizen-parents. For example, students saw expression of creativity as more important that the other groups did and would spend more money on adapting to a changing world--a goal school personnel do not value highly. Overall, the respondents thought students having the chance to express creativity and to develop a positive attitude toward learning were least likely to occur.

On specific OSPI programs, respondents allocated most resources to equal educational opportunity and statewide student assessment, with drug abuse and career education tied for third. Least state effort was allocated to school reorganization and student rights.

What did respondents think of the OSPI itself? The most negative opinions were that the OSPI does not allow all people to participate in governance nor does it have everyone's support. School personnel were especially negative. The best features of the OSPI were its qualified leadership and qualified personnel. It is most in need of improvement in obtaining public support and in maintaining effective contact with local, regional, and other state agencies.

The technical results of the field test are discussed, and the instrument is revised on the basis of the technical results. Conditions under which the instrument should be used are discussed, including sampling schemes, analysis-of-data techniques, and the limitations of the instrument. The main limitation is in domains the instrument does not tap, namely respondents' deep-seated and

underlying hostilities toward institutions. Procedures for strengthening these weaknesses are discussed. Three basic plans for employing these techniques with accompanying cost estimates are presented. Finally, some suggestions for further development are spelled out, such as collecting the data through the PLATO computer terminals to be installed throughout the state.

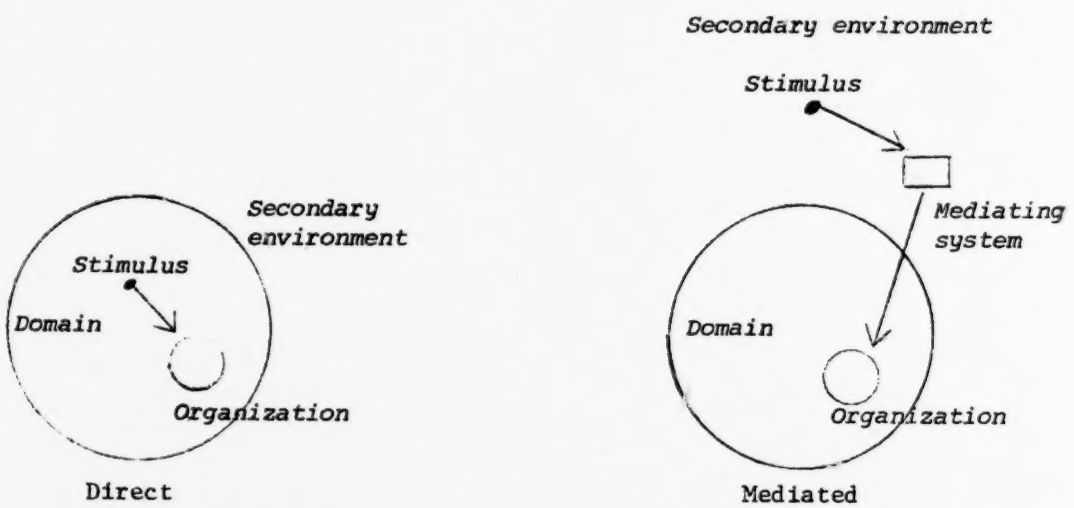
Why It Should Be Done

There is increasing awareness in educational-policy circles of the necessity of ascertaining the opinions of significant reference groups if any real changes in current educational structures are to occur. Knowledge of the opinions of various client publics is also essential in formulating policy. In Illinois some studies of educational goals and priorities have already been undertaken, such as Title III needs assessments and the public hearings held throughout the state by the OSPI. However, educational goals and priorities change.

For some time Stake (1970) has advocated treating objectives and priorities as empirical data rather than as "givens." Carefully treated, such data might be used over time as indicators of educational trends. For example, the University of Michigan has been able to predict significant shifts in the national economy by surveys of the American consumer. While such an achievement is unrealistic if resources are limited, monitoring beliefs about the OSPI in particular and education in general might help the OSPI become more effective as an education institution.

Organizational theory confirms the wisdom of such an approach. In a recent study of organizational innovativeness, Normann (1971) distinguished between the primary environment of the organization--the organizational "domain"--and the secondary environment (Figure 1).

Figure 1. Perception of Environmental Stimuli



Because of the constant interaction among people in the organizational domain, it is easy for the organization to perceive and interpret events. But for events outside the domain there are no appropriate rules for attention and decoding. Major changes in an organization require a change of domain. The existing cognitive structure (attention rules, decision rules, interpretation rules, etc.) is simply insufficient. New goals, values, and power structures are needed. On the other hand, minor changes can be accommodated within the existing domain. To a considerable extent, then, organization innovativeness is accompanied by changes in the organizational domain.

There is at least one major danger: When stimuli are received from outside the normal domain, the organization has no way of checking their validity. In other words, the perception is mediated rather than direct. It is possible for the organization to receive bad information from this mediating source without knowing it. For example, one small drug company was induced by its pharmacologists to develop new products for which there was no market.

Another way to conceive of organizational behavior is in terms of an organizational image. Though images exist only in the minds of individuals, in a sense there is also an organizational image--it is the collectivity of images held by organizational members. This composite image is not just a simple sum of all the images of all the individuals within the organization since the image of the chief executive obviously has considerably more impact on the future behavior of the organization than that of members lower in the hierarchy. On the other hand, it is precisely through communicating his own image to the other organizational members that the executive makes the organization respond to his intents.

Furthermore, each department within a large organization has a separate image which has some similarity to the general organizational image. In fact, each department is a cohesive group to the degree it shares a common image. Numerous works on bureaucratic organizations have contended that the subgroup structure in a given organization generates intense in-group feelings and the loyalty to this section and to the section chief can become a paramount consideration. Conformity to the regulations becomes the end in itself. Deviation from accepted procedures is dangerous and the result is the unacceptability of any manner of behavior other than that being pursued. This leads to the "monocratic stereotype." No conflict and no divergent ideas are allowed within the structure. Hence, even alternate ways of solving problems are suppressed. In fact, the most difficult thing for an organization to do is to generate an alternative way of doing things.

To the degree the organization is isolated and all lines of communication lie within it, the organizational image is self-perpetuating. The messages received are always confirmatory as they originate from essentially the same image. The net result is that any information received by the organization is not likely to change the organization's image. The organizational self-image remains intact and the organization pursues only goals defined in that image. Thus the organization becomes increasingly inward-looking and farther and farther removed from the considerations of its clients. This alienation is a natural and progressive process.

Instrument Development

The Rationale

What type of data collection would best suit the demands of the situation? It was assumed from the beginning that the method would have to be inexpensive, easy to administer, and easy to interpret. These requirements indicated a survey either by interview or by questionnaire. Consideration that the instrument might be used to fulfill federal reporting requirements led to the questionnaire choice, some limitations of which will be described later.

What should the questionnaire contain? This was the easiest of all questions to answer. The OSPI had held hearings throughout the state in an attempt to determine state educational goals. Those were collated and explicated by a citizens committee and the OSPI in a document entitled Action Goals for the 1970's: An Agenda for Illinois Education. Within the state office this document had assumed an unchallenged authority. The validity of the content of the questionnaire was established by basing it on this document which had been compiled by public testimony, assembled by a citizens group, and accepted by the OSPI.

What form should the questionnaire take? The leading work on this point has been done by Gooler and Stake at CIRCE in Strategies for Obtaining Clarification in Educational Priorities (Gooler, 1971), "Objectives, Priorities, and Other Judgment Data," (Stake, 1970), and "Measuring Educational Priorities," (Stake and Gooler, 1971). The essence of this research is presented in Figure 2.

This design suggests that significant differences in priorities may occur among such groups as citizens, teachers, etc.; that priorities will vary depending on whether the goals are stated as broad aims, course content, or behavioral objectives; that they will vary depending on whether the scale indicates importance, time allotment, cash allotment, etc.; and that they will vary depending on whether they are "real" or ideal.

Stake and Gooler suggest that data be collected within all of these cells.. Since this would result in a very long instrument, only the most important goals treated with varying scales were included in our instrument. Their ideas were further modified for this study by substituting the concept of "feasibility" for that of "real." Rather than asking whether certain goals were being achieved, it was decided to ask for the likelihood of achievement. It is conceivable that one might hold a goal highly desirable yet think it cannot be pursued successfully.

Part IA of the instrument listed the nine major specific goals from Action Goals for the 1970's and asked for rating in terms of importance. Part IB presented the same goals and asked for likelihood of accomplishment. Part IC presented the same goals and asked how much money should be spent on them. Different scales were used on the same goal set to emphasize the difference in the questions being asked and to break up the response set of the respondent.

Figure 2

DESIGN FOR A STUDY OF EDUCATIONAL PRIORITIES

TO WHICH PRIORITIES ARE GIVEN

- BROAD EDUCATIONAL AIMS
- SCHOOL COURSES, CONTENT, AND ACTIVITIES
- BEHAVIORAL GOALS

VIEWPOINTS

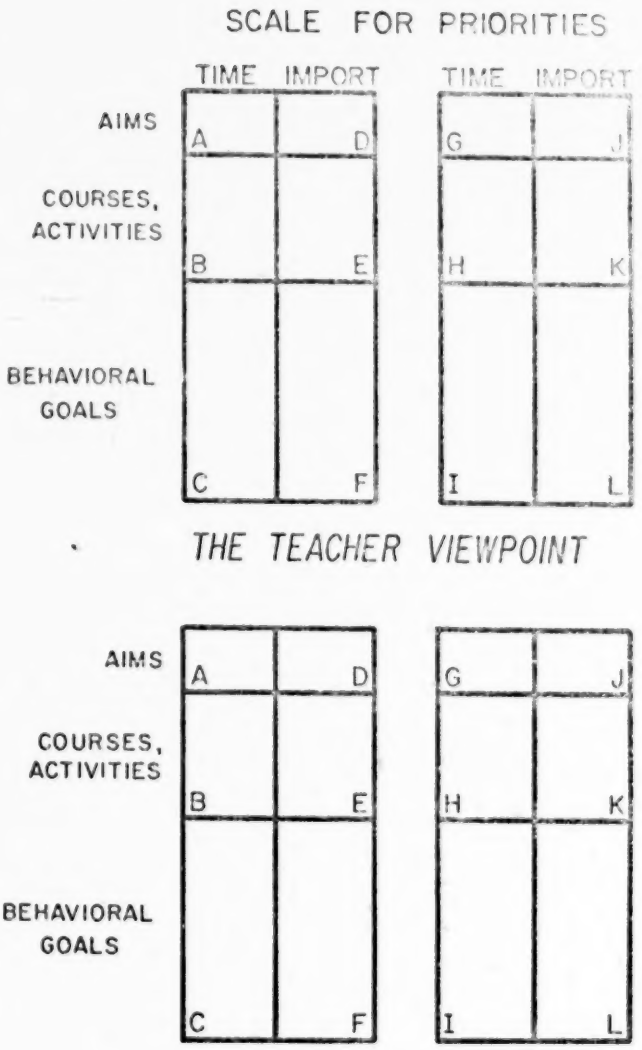
- CITIZENS
- TEACHERS
- ADMINISTRATORS
- PARENTS
- STUDENTS

SCALES FOR INDICATING PRIORITY

- IMPORTANCE
- TIME ALLOTMENT
- CASH ALLOTMENT
- VIGOR OF EFFORTS TO REMEDIATE

REAL - IDEAL PERSPECTIVE

- THAT WHICH IS OBSERVED
- THAT WHICH IS DESIRED



Part II asked for allocation of percent of OSPI effort across ten programs the OSPI is currently pursuing. Listing the programs required reducing many pages into one sentence. This was the most difficult material to condense. The programs were intentionally presented in ten parts so respondents could use deciles in responding.

Part III did not ask for a goal-priority response. Rather, it listed characteristics of the OSPI deemed necessary for it to obtain its goals and asked respondents to register their opinion on whether the OSPI currently had that trait. In other words, this was an attempt to uncover the image of the OSPI itself as perceived by various publics.

The last part of the instrument was taken directly from Gooler's dissertation and not from the OSPI document. It asks the respondent to choose among three major purposes of education: the human purpose, the knowledge purpose, and the career purpose.

The instrument underwent several revisions and was reviewed by several people before being field tested. A copy, including the tally from the field tests, is presented below.

The Instrument

WHICH EDUCATIONAL PRIORITIES FOR YOUR STATE?

During 1971 the Office of the Superintendent of Public Instruction (OSPI) held a number of public hearings throughout Illinois to ask its citizens what the future of education in the state should be. Many ideas emerged from these hearings. Not all of them can be pursued with equal vigor, however, because resources are always limited. Your answers to the questions in this booklet will help tell us which ideas should be pursued the most and how OSPI can better help achieve them. This is an opportunity for you to have a direct influence on the education of the children in your state.

To which group, or groups, do you belong?

_____ School Superintendent

_____ School Principal

_____ Teacher

_____ Student

_____ School Board Member

_____ Parent of School Child

_____ Legislator

_____ Citizen

_____ Other _____

I. Goals

A. How important is it for the Office of the Superintendent of Public Instruction to pursue these goals? *(Please indicate by checking one box in each row.)*

	This is a goal which should be			
	Quite unimportant	Not Particularly important	Very important	Absolutely vital
1. Students should master the basic skills of reading, communication, computation, and problem solving		2	17	21
2. Students should demonstrate a positive attitude toward learning		5	23	11
3. Students should demonstrate a feeling of adequacy and self-worth		5	24	10
4. Students should be given the freedom to express the full extent of their creativity	2	8	19	11
5. Students should acquire positive attitudes toward persons and cultures different from their own		8	25	6
6. Students should have equal educational opportunities	1	1	19	17
7. Students should receive opportunity in training for the world of work	4	8	18	9
8. Students should have experience in adapting to a changing world		10	18	11
9. Students should acquire habits and attitudes of good citizenship	2	5	19	13

B. What is the likelihood that each of these goals will be achieved? *(Please indicate by placing an "X" along the line.)*

	None	Not very likely	Likely	Highly Likely	Certain
1. Students should master the basic skills of reading, communication, computation, and problem solving		1	3 10	9 10	3 3
2. Students should demonstrate a positive attitude toward learning		11	6 15	2 2	2
3. Students should demonstrate a feeling of adequacy and self-worth	1	4	3 23	3 2	1
4. Students should be given the freedom to express the full extent of their creativity	1	16	1 8	3 6	3
5. Students should acquire positive attitudes toward persons and cultures different from their own	1	8	4 15	4 5	2
6. Students should have equal educational opportunities	1 1	8	1 10	3 6	4 5
7. Students should receive opportunity in training for the world of work		5	3 19	3 6	2 1
8. Students should have experience in adapting to a changing world	4	5	20	4 3	2 1
9. Students should acquire habits and attitudes of good citizenship	1	8	2 17	4 5	1

C. How much money should the Office of the Superintendent of Public Instruction (OSPI) spend on each of these goals? *(Please indicate by checking one box in each row.)*

	The OSPI should spend			
	No money	Little money	Quite a lot of money	As much money as possible
1. Students should master the basic skills of reading, communication, computation, and problem solving.		4	13	22
2. Students should demonstrate a positive attitude toward learning	3	14	16	6
3. Students should demonstrate a feeling of adequacy and self-worth	6	12	13	6
4. Students should be given the freedom to express the full extent of their creativity	1	18	15	5
5. Students should acquire positive attitudes toward persons and cultures different from their own	1	20	15	3
6. Students should have equal educational opportunities	1	3	19	16
7. Students should receive opportunity in training for the world of work	1	8	19	12
8. Students should have experience in adapting to a changing world	2	16	15	6
9. Students should acquire habits and attitudes of good citizenship	2	16	14	7

II. Programs

Below are the goals of programs that have actually begun. How much of the current total efforts of the Superintendent of Public Instruction (OSPI) should be expended on each one? (Roughly estimate percent of state effort, by tens if convenient.)

	% of Total Effort
1. The assessment of student achievement, attitudes, and needs throughout the state.	14%
2. The provision of equal educational opportunities for all students regardless of their racial or cultural origins or handicaps by eliminating all patterns of segregation and by providing programs and services.	18%
3. Increased public participation in school decision-making through public hearings, student representation, appeal procedures, citizen advisory councils, etc.	8%
4. The reorganization of school districts so each district will have sufficient size and resources.	5%
5. The reorganization of pre-kindergarten education and individualized instruction in local schools.	7%
6. The incorporation of drug abuse education in local schools.	12%
7. The establishment of career education and adult education programs.	12%
8. The adjustment of professional preparation, certification, and retraining procedures.	8%
9. The improvement of pupil services such as school counselors, psychologists, and social workers.	10%
10. The adoption of a statewide policy of student rights.	6%
TOTAL	100%

III. Current Status of OSPI

A. In order to facilitate reaching these goals for the State's children, the Office of the Superintendent of Public Instruction (OSPI) feels that it should possess certain qualities. These qualities are listed below. *Please indicate the extent of your agreement with the assertion that the Office of the Superintendent of Public Instruction now possesses each of these qualities.*

	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
1. Is accountable to the citizens of the state		7	13	12	5
2. Is flexible, adaptive, and open	1	4	19	14	1
3. Is relevant for the times	1	8	14	16	1
4. Provides for equal educational opportunity		5	11	20	1
5. Encourages new developments		5	10	20	3
6. Is humanistic		3	20	12	3
7. Adapts to important changes		6	16	10	5
8. Provides for continuous training and retraining of professional educators		5	13	19	2
9. Allows all people to participate in governance	2	13	20	4	
10. Has sufficient financial support	1	7	18	11	1
11. Has qualified personnel			15	17	5

	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
12. Has qualified leadership		1	16	16	4
13. Has everyone's support	5	21	9	2	1
14. Has sound information basis for decision-making		5	19	10	2
15. Is sensitive to state, regional and local needs		8	12	16	1
16. Maintains effective contact with local, regional, and state agencies		6	17	13	1
17. Encourages coordinated efforts among local, regional and state agencies		3	18	15	1
18. Has sufficient "venture capital" to support new educational practices	2	9	20	5	2

B. In which <u>three</u> of these qualities does the OSPI most need improvement? *(Write the number of the quality in the space below.)*

1. number 13
2. number 16
3. number 1 & 10

1. 8	10. 8
2. 6	11. 2
3. 4	12. 3
4. 6	13. 13
5. 3	14. 2
6. 2	15. 6
7. 0	16. 9
8. 7	17. 3
9. 6	18. 5

At some time each of the three paragraphs below has been offered as THE MAIN PURPOSE of our schools. Which do you think best states what the schools <u>should</u> do? *Please indicate your opinion on each purpose by circling one letter below each paragraph.*

The HUMAN Purpose of Education

The main responsibility of the schools should be to examine what man is--his history, his values, his work and play, his arts and sciences, what he has accomplished and what he has failed to accomplish. The schools should give students the opportunity to be a participant in the human experience, the aesthetic and emotional experience as well as the intellectual experience.

THE STATEMENT DIRECTLY ABOVE TELLS US--IN MY OPINION--WHAT SHOULD BE

a. THE <u>MOST</u> IMPORTANT TASK OF THE SCHOOLS (14)
b. AN IMPORTANT TASK, BUT NOT THE MOST IMPORTANT TASK, OF THE SCHOOLS (20)
c. A RELATIVELY UNIMPORTANT TASK OF THE SCHOOLS (6)
d. A TASK THAT THE SCHOOLS SHOULD NOT UNDERTAKE (0)

The KNOWLEDGE Purpose of Education

The main responsibility of the schools should be to help young men and women know all about the world. Each student should have maximum opportunity to understand the basic facts and concepts of nature, technology, commerce, the languages, the fine arts and practical arts. the schools should help young men and women build skills for understanding--and even discovering--new knowledge.

THE STATEMENT DIRECTLY ABOVE TELLS US--IN MY OPINION--WHAT SHOULD BE

a. THE <u>MOST</u> IMPORTANT TASK OF THE SCHOOLS (18)
b. AN IMPORTANT TASK, BUT NOT THE MOST IMPORTANT TASK, OF THE SCHOOLS (21)
c. A RELATIVELY UNIMPORTANT TASK OF THE SCHOOLS (1)
d. A TASK THAT THE SCHOOLS SHOULD NOT UNDERTAKE (0)

The CAREER Purpose of Education

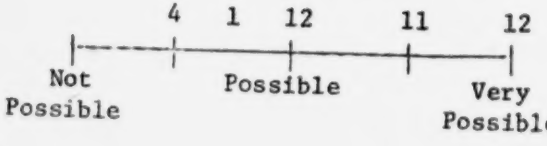
The main responsibility of the schools should be to prepare young people for their life-work. Though most careers require training on the job and continuing education throughout life, the schools should lay the foundation for successful work. For students who will take further training in a technical or professional area, the schools should emphasize entrance requirements and preparatory skills.

THE STATEMENT DIRECTLY ABOVE TELLS US--IN MY OPINION--WHAT SHOULD BE

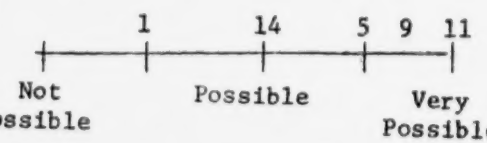
a. THE <u>MOST</u> IMPORTANT TASK OF THE SCHOOLS (17)
b. AN IMPORTANT TASK, BUT NOT THE MOST IMPORTANT TASK, OF THE SCHOOLS (21)
c. A RELATIVELY UNIMPORTANT TASK OF THE SCHOOLS (2)
d. A TASK THAT THE SCHOOLS SHOULD NOT UNDERTAKE (0)

Do you think it is possible for the school to accomplish these purposes? *Please make an X along the line for each purpose, indicating how possible you think it is that the school could accomplish each purpose <u>if it attempted to do so</u>.*

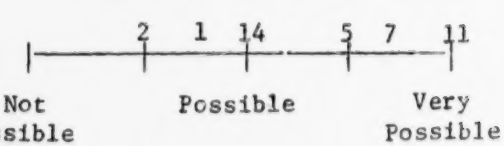
The *HUMAN* Purpose



The *KNOWLEDGE* Purpose



The *CAREER* Purpose



The Field Test

Validation of Instrument

Two basic procedures were considered for the field test. The traditional method is to administer the instrument to a fairly sizable sample and to analyze the responses and distribution of responses to each item. The second way is to administer the instrument to a known group of people and see if they respond as one would expect them to. The second way was chosen because interviewing a small number of people was thought to produce better instruments; because a CIRCE staff member had been doing a two-year on-site study and a known population was readily available; and because the validity of needs assessment instruments, particularly their language, was challenged within CIRCE.

A highly varied sample of people were taken from a medium-sized Illinois city, all of whom were known personally. A sample of the variety of respondents can be gained from a partial list:

High school librarian/ teacher negotiator
Curriculum director
Daughter of curriculum director
Housewife/saleswoman
Math teacher
Elementary principal
Widow
Grocer
Bank Clerk
High School student
Businessman
University drop-out
Radio station manager
Service station owner
Farm wife
School clerical assistant
ADC (Aid to Dependent Children) mother
Teacher
School board member/ construction worker
Teacher/principal
Funeral director
Bank vice-president
School board member
Farmer
High School drop-out
Telephone lineman
Factory worker
Invalid ex-sheriff
Junior high school student
Factory foreman
University student

Nineteen people filled out the instrument and returned it without any help. Twenty people were interviewed as they filled out the instrument. Eleven more were interviewed in two groups. The interviews were informal. They stressed any difficulties which the respondents might have had in filling out the instrument and ideas that the instrument may have generated.

Substantive Results

Analysis of the forty completed copies of the instrument yields numerous observations about the respondents' feelings towards educational goals and programs, the OSPI, and the purpose of education. These observations are intuitive and are not derived from the formal analysis suggested in the "Conditions of Use" section.

Goals. When responses of all persons completing the instrument are considered together, the following observations can be made about the importance of the goals:

1. All nine goals are either "very important" or "absolutely vital."

2. Goal 1 (mastering basic skills) and Goal 6 (having equal educational opportunities) are most important.

3. Goal 7 (having the opportunity for training for the world of work) and Goal 4 (having the freedom to fully express their creativity) are least important.

There are noteworthy variations in the response tendencies when responses of the three groups completing the questionnaire (students, school personnel, and citizens and parents) are considered separately. These variations include the following:

1. Students think Goal 1 (mastering basic skills), Goal 7 (having the opportunity for training for the world of work), and Goal 9 (developing good citizenship) are less important than do school personnel and citizens and parents.

2. Students think Goal 4 (having the freedom to fully express their creativity) is more important than do either of the other groups though school personnel think it is more important than do citizens and parents.

3. Citizens and parents feel Goal 2 (demonstrating a positive attitude toward learning) is more important than the other groups do.

4. School personnel think Goal 8 (having experience adapting to a changing world) is less important than the others do.

A great variety of opinion exists about the likelihood of any of the nine goals being achieved. However, a majority of the total number of respondents feel it is likely that <u>each</u> goal will be achieved. Particularly positive or negative response tendencies include the following:

1. More people are "certain" that Goal 6 (having equal educational opportunities) will be achieved than any of the other goals although opinion is quite divided on the subject. Students are most optimistic, school personnel are least so.

2. All but one respondent feels that Goal 1 (mastering basic skills) will be accomplished. More respondents feel it is "highly likely" that this goal will be achieved than any other goal.

3. Least likely to be achieved is Goal 4 (having the freedom to express fully their creativity) though students feel it is more likely that this goal will be achieved than school personnel or citizens and parents do.

4. Respondents are rather pessimistic about Goal 2 (demonstrating a positive attitude toward learning) being accomplished, especially school personnel.

5. Students are slightly less optimistic than the other respondents that Goal 8 (having experience adapting to a changing world) will be accomplished.

Respondents feel the most money should be allocated to help achieve three goals: Goal 1 (mastering basic skills), Goal 6 (having equal educational opportunities), and Goal 7 (having the opportunity for training for the world of work). Citizens and parents want to spend a lot of money on all three of these goals. School personnel support spending to achieve Goal 1 more than students or citizens and parents do while students support spending for Goal 6 and Goal 7 less than the other groups do. Almost half of the respondents (over half for Goal 5) said little or no money should be spent on the other goals.

Some interesting variations in their ideas about how the money should be spent exist among the three groups.

1. School personnel strongly support spending for Goal 2 (demonstrating a positive attitude toward learning) and Goal 3 (demonstrating a feeling of adequacy and self-worth) while students and citizens and parents do not.

2. Students feel little money should be spent on Goal 9 (developing good citizenship) compared to the other groups.

3. Students would like "quite a lot" of money spent on Goal 8 (having experience adapting to a changing world) while the other groups generally feel a "little" would be sufficient.

4. Citizens and parents think less money should be spent on Goal 4 (having the freedom to express fully their creativity) and Goal 5 (acquiring positive attitudes towards other persons and cultures) than do students or school personnel.

When respondents' feelings about the importance of the goals, the likelihood of their being accomplished, and the allocation of money to help achieve them are combined, one can conclude that respondents believe Goal 1 (mastering basic skills) should receive top priority, closely followed by Goal 6 (having equal educational opportunities). Respondents indicated that both of these goals are "very important" or "absolutely vital," that it is highly likely they will be achieved (though opinion about Goal 6 was more divided on this point), and that much money should be allocated to help achieve them. They are definitely top priority. Other priorities or preferences are less obvious when considering all three variables (importance, likelihood of achievement, money allocation). However, additional priorities could be established based on all three variables -or only on one or two of them-- depending on what is desired.

Programs. The five main programs on which respondents think the OSPI should concentrate its efforts are the following:

1. Providing equal educational opportunities (Program 2) is clearly the most important program. Respondents think it should receive more support than any of the other programs, approximately 18% of the OSPI effort. However, citizens and parents believe this program should receive slightly less effort than students or school personnel do.

2. Statewide student assessment (Program 1) is second in importance; it should receive 14% of the OSPI effort. It has the support of all three groups. Citizens and parents think this program should receive the same amount of effort as Program 2 (equal educational opportunities) and Program 6 (drug-abuse education). School personnel think an equal amount of effort should go to Program 7 (career and adult education) and to Program 9 (pupil services).

3. Program 6 (drug-abuse education) and Program 7 (career and adult education) should each receive 12% of the OSPI effort. Citizens and parents particularly favor Program 6; school personnel support Program 7 more than the others do.

4. Improving pupil services (Program 9) should receive 10% of the OSPI effort. This program is supported by the school personnel and citizens and parents; students prefer Program 3 (increased public participation in school decision-making).

Current Status of the OSPI. Though many respondents indicate "No Opinion," more respondents agree than disagree with the assertions that the OSPI does possess each of the desired qualities, with three exceptions. Of those expressing an opinion, the majority of respondents disagree with assertion 9 (the OSPI allows all people to participate in governance), assertion 13 (the OSPI has everyone's support), and assertion 18 (the OSPI has sufficient "venture capital" to support new educational practices). All school personnel expressing an opinion disagree with assertion 9, and all school personnel disagree with assertion 13. Agreement is most strong with assertions 11 and 12 (the OSPI has qualified personnel and the OSPI has qualified leadership).

Analysis of the opinions of each group yields several other noteworthy observations:

1. School personnel are more inclined to believe the OSPI is not relevant for the times (assertion 3) than students or citizens and parents are.

2. Most school personnel indicate "No Opinion" about assertion 7 (the OSPI adapts to important changes), a quite atypical response for that group. Students and citizens and parents generally agree with the assertion.

3. School personnel disagree more than the other two groups with assertion 15 (the OSPI is sensitive to state, regional, and local needs) and assertion 16 (the OSPI maintains effective contact with local, regional, and state agencies) though opinion is quite divided.

4. Students express some disagreement with assertions 2 (the OSPI is flexible, adaptive, and open), 5 (the OSPI encourages new developments), and 6 (the OSPI is humanistic) though the other groups agree with these assertions.

When responses of all individuals are considered together, the following four qualities of the OSPI need most improvement: quality 13 (the OSPI has everyone's support); quality 16 (the OSPI maintains effective contact with local, regional, and state agencies); quality 1 (the OSPI is accountable to the citizens of the state); and quality 10 (the OSPI has sufficient financial support).

Opinion about which qualities need improvement the most varies substantially among the three groups. Students agree that assertion 13 (the OSPI has everyone's support) needs the most improvement. However, they feel qualities 2 (the OSPI is flexible, adaptive, and open), 5 (the OSPI encourages new developments), and 14 (the OSPI has sound information basis for decision-making) also need more attention.

School personnel wish the OSPI would become more sensitive to state, regional and local needs (assertion 15) more than anything else. They also feel qualities 2 (the OSPI is flexible, adaptive, and open), 9 (the OSPI allows all people to participate in governance), 10 (the OSPI has sufficient financial support), and 16 (the OSPI maintains effective contact with local, regional, and state agencies) particularly need improvement.

Citizens and parents are most concerned with the OSPI's becoming more accountable to the citizens of the state (quality 1). They also feel improvements are needed in quality 4 (the OSPI provides for equal educational opportunities); quality 8 (the OSPI provides for continuous training and retraining of professional educators); quality 13 (the OSPI has everyone's support); and quality 16 (the OSPI maintains effective contact with local, regional, and state agencies).

Purpose of Education. When responses of all respondents are considered together, there is no one main purpose of schools. There is a tie, essentially, between the knowledge and career purposes. Group variations in response are striking, however. Students decidedly prefer the human purpose of education; school personnel definitely prefer the knowledge purpose; citizens and parents clearly prefer the career purpose. All respondents feel it would be possible to accomplish all three purposes. However, school personnel are less optimistic about accomplishing the human purpose than are the other groups (particularly the students) and they are more optimistic about achieving the knowledge purpose.

Technical Results

General. Of all parts of the instrument, the "money," "program," and "current status" sections are most vital; the "importance" and "likelihood" sections are next; and the "general purpose" section is least vital to the total instrument. If the instrument were to be used in abbreviated form, that order of priority would be suggested.

The first problem with the existing instrument is that many people did not know what the OSPI was. In the cover sheet for the Revised Instrument an explanatory sentence has been added. In addtion, many respondents were not able to differentiate between what the OSPI should do and what local agencies should do in sections IA, IB, and IC. The Revised Instrument solves this problem by asking what goals "schools" should pursue. OSPI objectives will have to be inferred from responses to these statements. The typical citizen cannot make such fine distinctions. Conforming to this change, the general-purpose-of-education section now succeeds the first three sections since they all ask questions about schools in general.

The last two sections ask for opinions about OSPI programs and the OSPI itself. Since these programs and traits are more specific than statements in earlier sections of the instrument, some room is left for "No Opinion" if the respondents have no set feelings. It appears that school personnel have the most definite opinions about the OSPI so this may be the main group to analyze for this purpose.

Parts IA, IB, IC. Part IA, which asks for the "importance" on each of the basic goals, is the least differentiated of all the sections. Since these goals were preselected as important during the elaborate hearing process, it is not surprising that they are still seen as important. In the Revised Instrument the scale headings have been changed in order to "stretch out" the responses and further differentiate among goals. The new headings become "Not Particularly Important," "Important," "Very Important," and "Absolutely Vital." The only other change is in Item 7. Since the term "world of work" means "effort" to some people, it was changed.

Responses in Part IB nicely discriminated among the items and also contrasted with responses to items in Part IA. Some goals considered highly important were not seen as being feasible. Respondents had little trouble filling out the scale. However, there was some trouble analyzing it since some people marked right over the lines while others marked in between. One could analyze it with an overlay or convert it into a four-column box scale like the others with similar labels for the boxes. We like it the way it is and prefer to put up with the scoring inconvenience.

Responses in Part IC also discriminated nicely among the items and contrasted with responses in sections IA and IB. The goals respondents think important and feasible are not always the ones on which they think the most money should be spent. Since respondents do respond differently to different scales, these findings justify the Stake-Gooler model used to construct the instrument.

"The General Purpose of School," originally the last part of the questionnaire, now becomes Part IV. It has undergone the most radical changes. As noted previously, it is the least vital section of the instrument, it was not based on the Action Goals document, and in many ways it yields the least information. It does have value, however, so it has been retained with extensive modification. Mainly it was too long and wordy. The paragraphs have been cut to one sentence. The response statements have been shortened and now include more interesting rankings. The feasibility scales, which produced little data of interest, have been eliminated entirely.

Parts II and III. The last two sections relate to the OSPI itself, as emphasized in their headings. The "program" section, originally in Part II, was considered to be the most questionable before the field test. It was questionable for two reasons: pages and pages of programs in the Action Goals document had to be reduced to ten statements and the unusual "percent-of-effort assignment" scale was used. Gooler had had considerable trouble with respondents using this scale. However, the programs were intentionally divided into ten statements and it was suggested that respondents estimate in tens. The results were gratifying. The section produced some of the most important results.

Respondents had some difficulty understanding what some statements meant. In item 9, for example, what are pupil services? But for the most part the problems were few. There were also relatively few complaints about the scale itself. The great advantages lie in the specificity. The items are actual OSPI programs, and the scale is a concrete assignment of effort that requires an adjustment of the other nine parts. The total effort must be distributed among all in a comparative sense. Hence, the findings are interesting. They show, for example, that student-rights programs are not greatly supported but that drug-abuse programs are. This does not mean that the OSPI should abandon the former and do the latter. But it is good data for consideration. This section is one of the strongest in the instrument.

The "Current Status" section also relates directly to the OSPI and also produced provocative information. In the Revised Instrument the "No Opinion" category is emphasized for those who do not feel sufficiently familiar with the OSPI to have an opinion. Since difficulties arose with a few terms like "humanistic" and "venture capital," these items were changed. Otherwise, the section remains the same since it seemed to work quite well in the field test.

To reiterate, the most productive sections appear to be the money rating of goals, the effort allocation across programs, and the current status of the OSPI sections. An abbreviated form of the instrument could be composed of these sections. However, there were no length problems at all with the original instrument and the general-purpose-of-education section has been greatly shortened.

Suggestions for Use

Revised Instrument

WHICH EDUCATIONAL PRIORITIES FOR YOUR STATE?

During 1971 the Office of the Superintendent of Public Instruction (the state agency in charge of administering programs in primary and secondary education) held a number of public hearings throughout Illinois to ask its citizens what the future of education in the state should be. Many ideas emerged from these hearings. Not all of them can be pursued with equal vigor, however, because resources are always limited. Your answers to the questions in this booklet will help tell us which ideas should be pursued the most and how OSPI can better help achieve them. This is an opportunity for you to have a direct influence on the education of the children in your state.

To which group, or groups, do you belong?

_____ School Superintendent

_____ School Principal

_____ Teacher

_____ Student

_____ School Board Member

_____ Parent of School Child

_____ Legislator

_____ Citizen

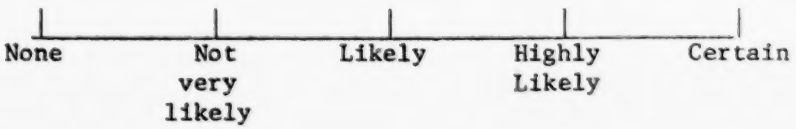
_____ Other _____

Goals

I. How important is it for the schools to pursue these goals? *(Please indicate by checking one box in each row.)*

	This is a goal which should be			
	Not particularly important	Important	Very important	Absolutely vital
1. Students should master the basic skills of reading, communication, computation, and problem solving				
2. Students should demonstrate a positive attitude toward learning				
3. Students should demonstrate a feeling of adequacy and self-worth				
4. Students should be given the freedom to express the full extent of their creativity				
5. Students should acquire positive attitudes toward persons and cultures different from their own				
6. Students should have equal educational opportunities				
7. Students should receive opportunity in training for a career				
8. Students should have experience in adapting to a changing world				
9. Students should acquire habits and attitudes of good citizenship				

II. What is the likelihood that each of these goals will be achieved? *(Please indicate by placing an "X" along the line.)*



1. Students should master the basic skills of reading, communication, computation, and problem solving

2. Students should demonstrate a positive attitude toward learning

3. Students should demonstrate a feeling of adequacy and self-worth

4. Students should be given the freedom to express the full extent of their creativity

5. Students should acquire positive attitudes toward persons and cultures different from their own

6. Students should have equal educational opportunities

7. Students should receive opportunity in training for a career

8. Students should have experience in adapting to a changing world

9. Students should acquire habits and attitudes of good citizenship

III. How much money should the schools spend on each of these goals? *(Please indicate by checking one box in each row.)*

	The schools should spend			
	No money	Little money	Quite a lot of money	As much money as possible
1. Students should master the basic skills of reading, communication, computation, and problem solving.				
2. Students should demonstrate a positive attitude toward learning				
3. Students should demonstrate a feeling of adequacy and self-worth				
4. Students should be given the freedom to express the full extent of their creativity				
5. Students should acquire positive attitudes toward persons and cultures different from their own				
6. Students should have equal educational opportunities				
7. Students should receive opportunity in training for a career				
8. Students should have experience in adapting to a changing world				
9. Students should acquire habits and attitudes of good citizenship				

IV. The General Purpose of Schools

Each of the three statements below has been offered as THE MAIN PURPOSE of our schools. Please indicate your opinion on each purpose by ranking them in importance. Write the number 1 in the blank preceding the purpose you think is most important, the number 2 preceding the next most important purpose, and the number 3 preceding the least important purpose.

RANK

_____ The HUMAN Purpose of Education
The main responsibility of the schools should be to examine what man is, what he has accomplished, and what he has failed to accomplish.

_____ The KNOWLEDGE Purpose of Education
The main responsibility of the schools should be to help young men and women build skills for understanding--and even discovering--new knowledge.

_____ The CAREER Purpose of Education
The main responsibility of the schools should be to prepare young people for their lifework.

V. Programs of the State Department of Education

Below are the goals of programs that have actually begun. How much of the current total efforts of the Office of the Superintendent of Public Instruction should be expended on each one? (Roughly estimate percent of state effort, by tens if convenient.)

	% of Total Effort
1. The assessment of student achievement, attitudes, and needs throughout the state.	_____
2. The provision of equal educational opportunities for all students regardless of their racial or cultural origins or handicaps by eliminating all patterns of segregation and by providing programs and services.	_____
3. Increased public participation in school decision-making through public hearings, student representation, appeal procedures, citizen advisory councils, etc.	_____
4. The reorganization of school districts so each district will have sufficient size and resources.	_____
5. The reorganization of pre-kindergarten education and individualized instruction in local schools.	_____
6. The incorporation of drug abuse education in local schools.	_____
7. The establishment of career education and adult education programs.	_____
8. The adjustment of professional preparation, certification, and retraining procedures.	_____
9. The improvement of pupil services such as school counselors, psychologists, and social workers.	_____
10. The adoption of a statewide policy of student rights.	_____
TOTAL	100%

VI. Current Status of the State Department of Education

A. In order to facilitate reaching these goals for the State's children, the Office of the Superintendent of Public Instruction (OSPI) feels that it should possess certain qualities. These qualities are listed below. *Please indicate the extent of your agreement with the assertion that the Office of the Superintendent of Public Instruction now possesses each of these qualities. If you do not have an opinion, mark "No Opinion."*

	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
1. Is accountable to the citizens of the state					
2. Is flexible, adaptive, and open					
3. Is relevant for the times					
4. Provides for equal educational opportunity					
5. Encourages new developments					
6. Adapts to important changes					
7. Provides for continuous training and retraining of professional educators					
8. Allows all people to participate in governance					
10. Has sufficient financial support					
11. Has qualified personnel					

	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
11. Has qualified leadership					
12. Has everyone's support					
13. Has sound information basis for decision-making					
14. Is sensitive to state, regional and local needs					
15. Maintains effective contact with local, regional, and state agencies					
16. Encourages coordinated efforts among local, regional and state agencies					
17. Has sufficient funds to support new educational practices					

B. In which <u>three</u> of these seventeen qualities does the OSPI <u>need most</u> improvement? *(Write the number of the quality in the space below.)*

1. number _____
2. number _____
3. number _____

Procedures and Conditions of Use

Limitations of the Instrument. The instrument seems to be valid for what it attempts to measure; however, it has two important limitations. First, it does not allow for or measure the underlying current of hostility toward institutions in general which was detected during personal interviews. This hostility might be due to neo-populist feelings. For example, one of the teacher negotiators said the instrument did not deal with the most important issues at all. Presumably these might involve teacher-administrator-community relationships. Such latent hostilities could be recognized in many of the respondents, but we could not think of any goals or sections to add to the instrument which would measure them.

The best way to detect these underlying attitudes is through informal interviews, since they are nebulous even in the minds of the respondents. Perhaps after a number of interviews a more formal approach could be determined. In that case, occasional interviews should supplement the administration of the instrument to pick up any domains missed by the questionnaire itself. In any case, interviews should be conducted since these attitudes are quite important and should not be neglected.

Although the instrument is not valid for domains it does not cover, there is little question that it is more valid than most of its kind. First, public hearings were held. Second, the hearings were summarized by a citizens group. Third, the instrument was constructed from the written document; and, fourth, the instrument was tried out with known respondents. However, even this elaborate process does not mean all important segments of public opinion are represented.

It may be that many attitudes were not represented in the public hearings; that, like Wallace supporters, the witnesses could not express their precise feelings; or that the group drafting the document excluded many of the feelings. There is no way of telling why or exactly what important domains of public feeling are missed by the instrument. However, this deficiency can be corrected by supplementing the instrument with some interviews.

The second limitation of the instrument is related to the first limitation. Words like "work" and "venture capital" do not mean the same thing to all social groups in this country. No doubt the goal expressions are strongly biased by the language of the highly educated. Both the citizen drafters of the document and the instrument developers represent this middle-class, educated bias. We know that it is there; we do not know how much it impedes communication.

Analysis of Results. The substantive results in this report were derived from frequency distributions. There seemed to be little need to deal with an N of forty in a more elaborate manner. As can be seen, much useful information can be gleaned this way. One can determine the most important items and least important items in each section and compare items across groups. It is essential to compare at least three groups--students, school personnel, and citizens. Looking solely at total summaries destroys the object of investigating various publics. The most

important comparisons are among groups. Subgroups within these main categories, e.g., teachers and administrators, may also be worth exploring. Simple comparisons may very well serve most purposes. We call this Level One analysis.

Level Two analysis might involve more statistics, such as standard deviations and means. One might test for differences between groups using chi-squares or test for differences across whole arrays of items using analysis of variance. Post hoc tests (e.g., the Scheffé) could determine which items are most different. One could also intercorrelate items to determine which items from different scales go together. For example, does the basic-skills goal go with the knowledge purpose of education or do people maintain those as independent categories in their mind? Naturally one would want to present the results of these analyses rather than the statistics themselves to the decision-makers.

Level Three analysis is the most sophisticated. Factor analysis of the entire instrument would extend the item intercorrelation mentioned above. The data could probably be reduced to a few basic factors. Or a section like OSPI status could be factor-analyzed to reduce the number of items. Is there a "public support for OSPI" factor? If the emphasis is on the different perceptions various publics have of education in general or of the OSPI in particular, discriminant analysis would show which items maximally discriminate among the groups and what the basic dimensions of these differences are. The possibilities are many, but the basic analysis should probably occur at Level One.

What weights should be assigned the importance, likelihood, and money criteria when applied to the same goals? There is no mechanical answer. Depending on one's purpose, one must weigh them intuitively. Should a goal with high importance, little money allocated, and low likelihood of achievement be pursued? This is where the judgment of the decision-maker must intervene.

Sampling Procedures

It is a well-established but little-publicized fact that "response error" overwhelms "sampling error." That is, a respondent misunderstanding an item or reading a wrong word causes much greater trouble than do improperly drawn samples. Response error may run five to ten times that of sampling error. Reputable authorities have suggested for this project that questionnaires simply be handed out to anyone available and sampling error be ignored. That is, within groups like administrators one could simply hand out questionnaires at a convention and not be too far off. That would certainly be the easiest and lowest-cost procedure.

Because of our knowledge of response error, this project concentrated on the validity of the instrument, a much more important and seriously neglected factor. Nonetheless, there is a strong tradition among psychometricians and sampling experts that sampling error be determined and reported in number form. Particularly if the data is highly publicized, some attention should be paid to sampling. Consequently, the sampling monitor for the National Assessment Project was consulted on this particular problem.

First, it is axiomatic that different publics be sampled. The basis of the whole plan is that different groups will respond differently. In our field test we distinguished among school personnel, students, and parents and citizens. At least these distinctions should be maintained in any study. Further, we suggest that administrators and teachers be handled as separate groups and, possibly, that citizens and parents be distinguished from one another. Legislators should be handled in an entirely separate manner specified later.

Three other stratifications might be useful: the six areas of the state, size of school district, and black-white or poor-not poor distinctions. It is important to note that the levels within strata may be independent of one another. That is, one might divide the state into the six regions and sample blacks and whites in the Chicago regions while sampling within different size school districts in southern Illinois. Such sampling will greatly increase the flexibility of the sampling design and greatly reduce sample sizes. Naturally though, such strata must be weighted in the total.

Any of the survey organizations, such as National Opinion Research Corporation, University of Illinois Survey Research Laboratory, or others within the state, would have little difficulty in drawing such samples since population sizes are readily available for the groups. However, such precision will increase the cost of the survey many times over.

Three Plans and Their Cost

There are three major plans for using the instrument. Which plan is used depends on the use to which the data is to be put and the resources available.

Plan A would permit the crudest kind of sampling procedure. The instrument could be given to superintendents at conventions, teachers at meetings, mailed to citizens, given to students in schools, etc. There would be no attempt to sample across areas, etc. The only caution would be to get sizable samples of the primary publics. The data would be analyzed by Level One techniques. This plan would cost about fifteen thousand dollars per year and would be sufficient if the purpose is to inform OSPI management, the original intent of this study.

Plan B would subsume Plan A but would include occasional interviews to probe beyond the instrument. Doing the interviews and interpreting them might raise the cost to between twenty and twenty-five thousand dollars. The data would still be used for management decision-making within the OSPI.

Plan C would be necessary if the data were to be used publicly to defend OSPI programs. Then the representativeness of the data would certainly be at issue. This would require a sophisticated sampling scheme of the type outlined in a previous section. Depending on how elaborate the scheme would be, the cost could run between fifty and one hundred thousand dollars. The data would have to be collected and analyzed within the subgroups determined by the scheme, thus driving costs up considerably. If the data were not to be used to publicly defend OSPI programs, these costs might seem exorbitant. Of course, these plans are not pure types and various combinations are possible.

One special exception is noteworthy. Originally, legislators were to be included as a respondent group. We now feel that they should always be interviewed when filling out a questionnaire. The relatively small number of legislators involved in educational affairs should not make interviewing too difficult if they are to be included as one group.

Supplementary Approaches

Besides the basic plans outlined above, a few other possibilities for further development might be kept in mind. One possibility lies in multidimensional scaling. Theoretically, one could present a group of legislators with a set of descriptions about the OSPI and through mathematical manipulation arrive at the bases on which they make their judgments. One could define the "judgment space" of every significant reference group and be able to predict how those groups would respond to various programs. The potential would be enormous.

Unfortunately, this approach is still potential. This study started off investigating multidimensional approaches and after some thought abandoned this approach as too impractical at the present time. This judgment was later born out by a CIRCE graduate student who had great difficulties in his dissertation with a similar problem.

Still in the future but considerably closer to reality is to use the University of Illinois PLATO (Programmed Logic for Automated Teaching Operations) system. Perhaps the most sophisticated computer-teaching operation in the country, PLATO will have over four thousand terminals in operation all over the state within a few years. An instrument like the goal-priority one could be programmed into the control computer and great masses of data could be collected and reported quite cheaply. CIRCE is currently helping evaluate the PLATO operation.

Most immediately realizable is to supplement the instrument with some in-depth interviews of what people are thinking about education. These interview data could eventually be transformed into items on the goal instrument. The model would be the University of Michigan Consumer Survey. Even more practical would be to collect data and subject the instrument to further statistical investigation--in other words, develop the instrument further.

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